

Systems of Inequalities Word Problems Homework

Name _____ Class Period _____

Set up the equations for each word problem. Make sure you define each of your variables!

1. It costs 50 cents to make a bracelet and \$1 to make a necklace. To make a profit, the total cost for bracelets and necklaces must be less than \$10. The jeweler can make no more than 14 pieces of jewelry each day. Write a system of inequalities to model the number of bracelets and necklaces to be made each day.

2. Mary babysits for \$4 per hour. She also works as a tutor for \$7 per hour. She is only allowed to work 13 hours per week. She wants to make at least \$63. Write a system of inequalities to represent this situation.

3. Fuel from QT cost \$2 per gallon and fuel from BP cost \$3 per gallon. You have at most \$18 to spend on fuel from both QT and BP. Write a system of linear inequalities to represent this situation.

